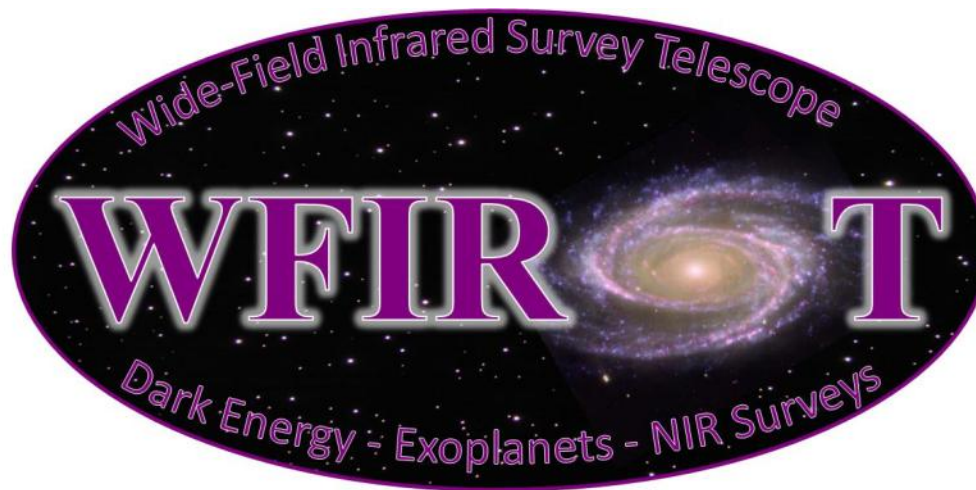


AFTA-WFIRST

Astrophysics Focused Telescope Assets - Wide-Field Infrared Survey Telescope (WFIRST)



Kevin Grady

September 9-10, 2013

Agenda – September 9th

9:30	Welcome	
9:40	Meeting Plan	David Spergel, Neil Gehrels
9:50	Headquarters Update	Paul Hertz
10:20	Project Report	
	Overview	Kevin Grady
	Requirements Development Process	Mark Melton
11:00	Break	
11:20	Project Report continued	
	Telescope Update	Jennifer Dooley
	Cycle 4 Design Update	Dave Content
	AFTA-WFIRST Coronagraph Design	Stuart Shaklan, Feng Zhao
12:20	Lunch	

Agenda – September 9th

continued

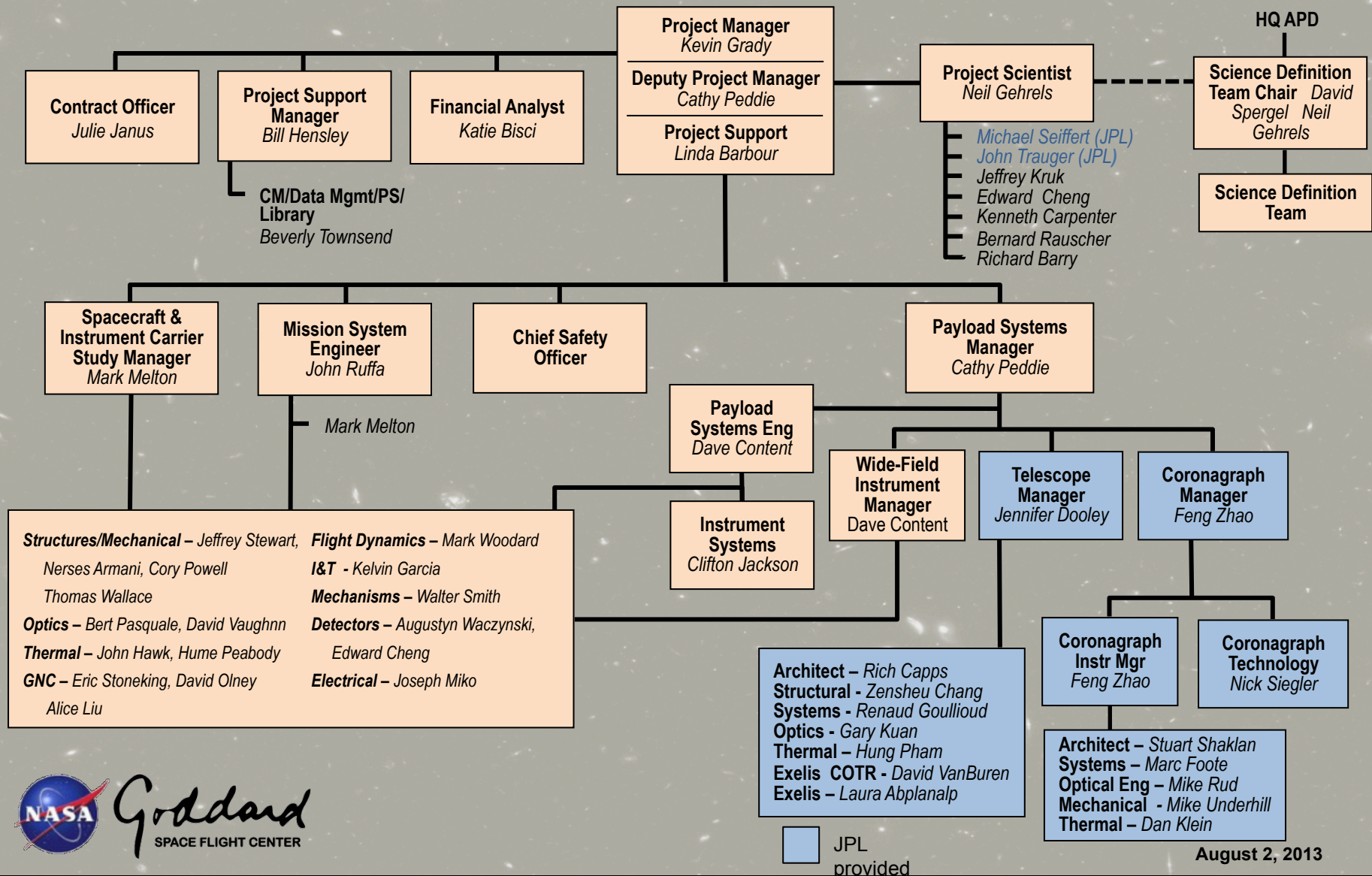
1:10	Japan Interest in AFTA-WFIRST	Toru Yamada
1:30	Coronagraph Selection Plan	Gary Blackwood
2:00	ExoPAG Study Analysis Group 9 Report	Remi Soummer
2:30	Giant Planet Atmosphere Modeling	Adam Burrows (by phone)
2:50	Disk Science with AFTA	Tom Greene
3:10	Break	
3:30	Splinter Meetings	
	1) Coronagraph Requirements (Bruce Macintosh)	
	2) Survey & DE Requirements with Consideration of Euclid & LSST (Alan Dressler, David Weinberg, Jason Rhodes)	
6:30	Dinner	

Agenda – September 10th

9:00	Report Out from Splinter Meetings	Bruce Macintosh, Alan Dressler
11:00	Euclid Status	Yannick Mellier
11:20	Break	
11:40	Full-Sky 1-Year Survey Option	David Spergel, Chris Hirata
12:10	Lunch	
1:10	Plan Forward	Neil Gehrels, David Spergel
2:00	Adjourn	

AFTA-WFIRST

Study Team Organization



AFTA-WFIRST Follow-on Study Charter

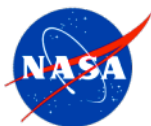
Study Content

- Continue pre-formulation activities for AFTA-WFIRST addressing two NWNH Decadal Survey No. 1 priorities:
 - Widefield infrared survey
 - Technology development for a planet-imaging mission beyond 2020
- Continue development of science requirements, investigation approaches, key mission parameters to support refinement and optimization of the AFTA-WFIRST DRM.
- Update the April 2013 Design Reference Mission (DRM).
- Develop cost and schedule scenarios.
- ***Overall mission cost is to be kept as low as possible while still achieving all or part of the science priorities for a widefield infrared survey telescope and exoplanet technology and science maturation.***
- Internal coronagraph will be included, consistent with the DRM and requirements for the WFIRST survey and the existing telescope hardware.
- Modularity to facilitate emerging robotic servicing capabilities shall continue to be studied.

AFTA-WFIRST Follow-on Study Charter

Study Focus Areas

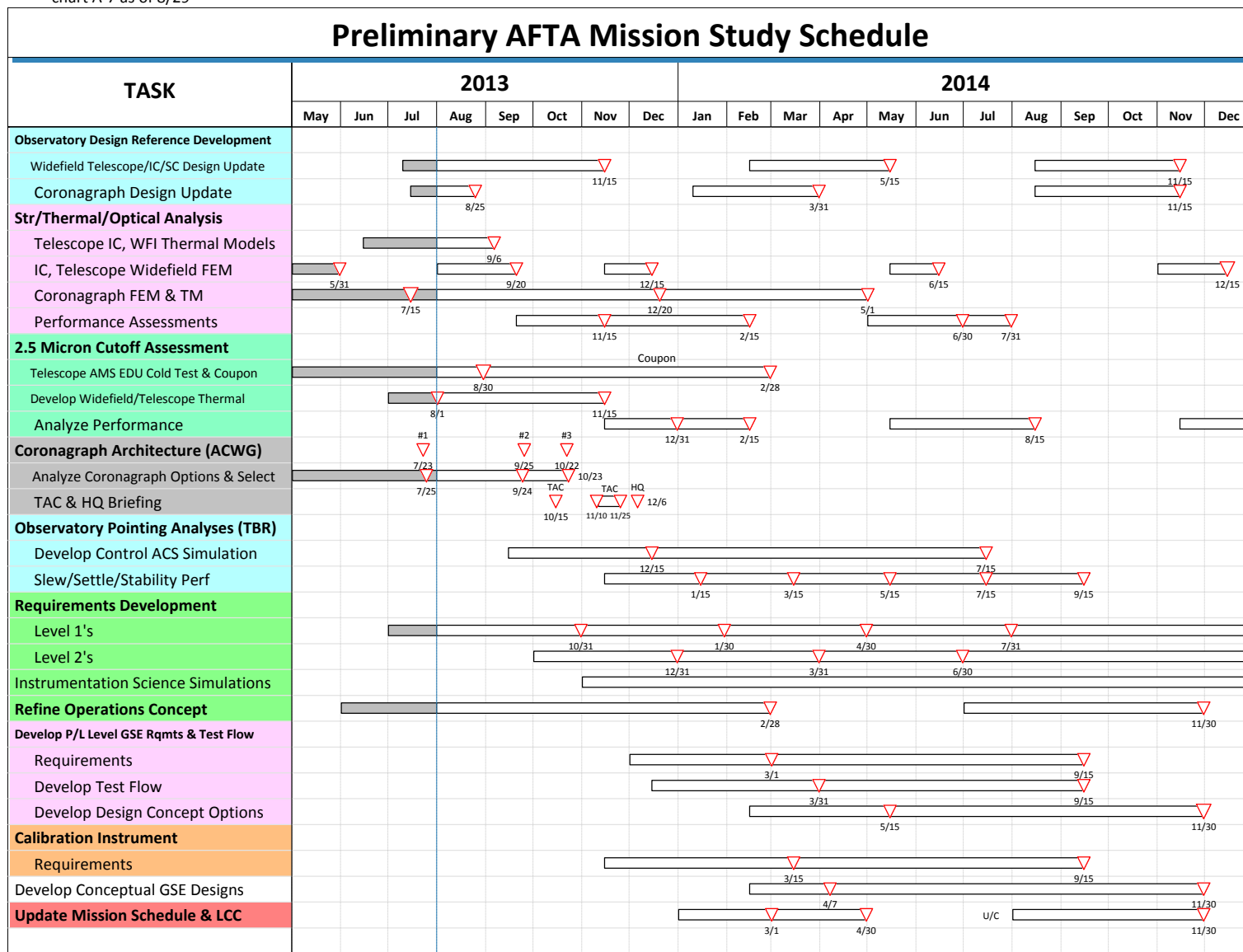
- Optimization of observatory to reduce risk and minimize cost
- Requirements development, refinement and flowdown, including calibration
- Operations concept refinement, survey yield predictions and survey efficiency drivers, including calibration
- Continue the study of spectroscopy capability options
- Maturation of the AFTA coronagraph instrument design, including a science assessment vs. performance, and a study of required observatory stability
- Payload structural, thermal and optical performance assessments
- Science case versus difficulty and risk of extending the long wavelength cutoff as far as 2.4 micron
- Reexamination of filter selection in light of long wavelength cutoff conclusion above
- Investigation of a possible all-sky one filter survey that could be done in one year
- Continuation of maturing estimates of expected microlensing rates, including dynamic range requirements for microlensing
- Modifications to the telescope assets to maximize the science return with minimal costs

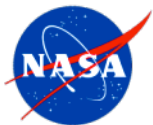


AFTA-WFIRST Study Schedule



chart A-7 as of 8/29





Conclusion



- Key products of the study:
 - Updated Design Reference Mission (DRM)
 - Further development of requirements and operations concept
 - Updated cost & schedule
- Study deliverables:
 - Interim report in April 2014
 - Final report in Jan 31, 2015
 - Aerospace CATE due Feb 27, 2015